

N^o 16,834



A.D. 1890

Date of Application, 22nd Oct., 1890

Complete Specification Left, 22nd July, 1891—Accepted, 17th Oct., 1891

PROVISIONAL SPECIFICATION.

Improvements in Crutches.

We JAMES WALKER Surgeon 9 Albion Street Hull & GEORGE JOHN SIMMONITE Engineer West's House Hull do hereby declare the nature of this invention to be as follows :—

The crutch head to be attached to leg of crutch by a moveable joint or its equivalent, to allow the leg of the crutch, to move backwards and forwards, without disturbing the position of the head of the crutch in the armpit, during use.

Also instead of the usual padding of the head—a strap of leather or similar material to be stretched from the two ends of the upper concave surface of crutch head the weight of the body being thus carried in a sling giving ventilation, comfort and freedom from friction.

Dated this 21st day of October 1890.

JAMES WALKER.

GEORGE JOHN SIMMONITE.

COMPLETE SPECIFICATION.

Improvements in Crutches.

We, JAMES WALKER 9 Albion Street Hull Surgeon & GEORGE JOHN SIMMONITE West's House Sculcoates Station Hull Engineer do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement :—

Our invention relates to crutches for lame people which may be for convenience of description described as usually consisting of two parts. The head and the leg shown in accompanying drawing Fig. 2. The head as "a." The leg as "b." The cross part at the top going under the arm pit we will call the head and the lower or upright part we will call the leg.

These two parts in ordinary crutches have up to now always been made joined together so as to move as one piece when in use.

Our invention is to attach the leg to the head movably, so that the leg may swing freely backwards & forwards without displacing or disturbing the position of the head when fixed under the arm Fig. 1.

This we do by connecting the leg with the head either by a pivot joint or by a ball and socket joint or preferably by making what may be described as a circular traversing joint which is shown in accompanying drawings the top end of the leg travelling in the head on a convex surface with or without rollers or balls shown in section in Fig. 3 & 4 of drawings (or what comes to the same thing a concave surface attached to the top end of the leg moving inside the head against rollers or balls, or in any other similar way). The object being to keep the crutch head, when in use, always level or horizontal as shown in Fig. 1 of accompanying drawings so that the head bears equally and continuously on the front and back of the armpit and also to allow the leg of the crutch to swing backwards and forwards as shown in Fig. 1 by dotted lines when in use in part of a circle whose centre is in the shoulder joint.

It is applicable to all kinds of crutches either single sticked or forked crutches as shown in drawings and the solid portions may be made either in wood or metal.

Also instead of the usual solid padding of the head we make the upper surface of the solid portion of the head concave from before backwards marked B in all figs. of drawings and stretch a strap of leather shown in drawings marked A in all 4 figs.

[Price 6d.]

Walker & Simmonite's Improvements in Crutches.

(or similar material) tightly across from end to end leaving a space when in use between the slightly yielding leather and the solid portion of the head giving comfortable pressure and ventilation to the patient.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed we declare that what we claim is— 5

1. To attach the leg of crutches to the head of same by a movable joint or its equivalent substantially as described.

2. Instead of the ordinary padding for the head of crutches we use what may be described as a suspension strap stretched from front to back of head of crutch, 10 substantially as described.

Dated this 20th day of July 1891.

JAMES WALKER and
GEO. JOHN SIMMONITE.

London : Printed for Her Majesty's Stationery Office, by Darling & Son, Ltd.— 1891.

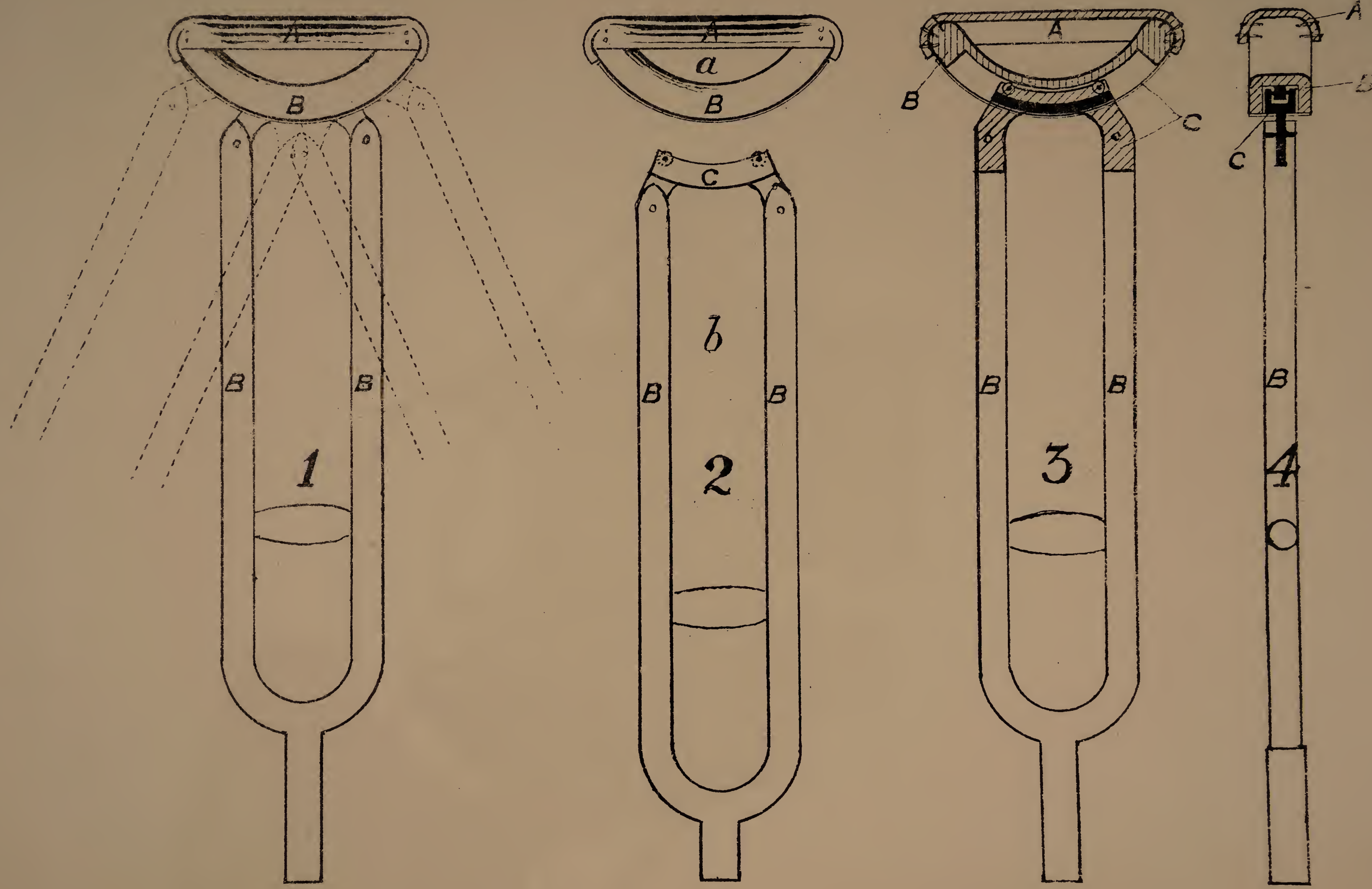


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WALKER & another's COMPLETE SPECIFICATION.

(1 SHEET)

[This Drawing is a reproduction of the Original on a reduced scale.]



LONDON. Printed by DARTING and SON Ltd.
for Her Majesty's Stationery Office. 1891.

Malby & Sons, Photo-Litho.

